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Bryan M. Elwood

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WOOD, HERRON & EVANS, LLP
2700 CAREW TOWER
441 VINE STREET
CINCINNATI, OH 45202

EXAMINER

DANNEMAN, PAUL

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to the Amendment filed on 8 June 2010.
2. Claims 1, 2, 4 and 21 have been amended.
3. Claim 16-21 have been cancelled.
4. Claim 22-24 have been newly added.
5. Claims 1-15 and 21-24 are pending and have been examined in this Office Action.

Response to Arguments

6. ***“Applicants respectfully submit that iButton take alone, or in combination with Richard et al. or any of the other prior art of record, fails to fairly teach or suggest a storage system including a real-time clock that tracks the timing of events associated with the items, wherein the events include temperature, location and access to the plurality of items by an user (claim 1) or location and access to the plurality of items (claim 21), and a processing device that reads and records the tracking data from the plurality of tracking devices, the timing of the events, and the identification of the user from the access control system as now recited in amended independent claims 1 and 21.”*** Respectfully the Examiner disagrees the iButton reference on page 5 clearly discloses that time and temperature can be tracked. Further disclosed on page 5 is that the iButton’s embedded computer chip includes a thermometer, a clock/calendar, a thermal history log and addition memory for storing a shipping manifest. Further disclosed on page 5 and 7 is the iButton’s globally unique address which when associated with the goods and/or a storage location can be used to determine the location of the goods.

7. Applicants argue ***“While iButton may grant access to an item and identify a user as argued by Examiner, iButton is completely silent with respect to tracking the timing of access to an item, and recording the time of access and the identification of the user accessing the item as now recited in each of amended independent claims 1 and 21. Richard et al. fails to cure this***

deficiency.” Respectfully these are limitation added by this Amendment and they are addressed below in the rejections under 35 U.S.C. § 103(a).

Claim Rejections - 35 USC § 103

8. **Claims 1 through 15 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over iButton and further in view of NPL_Log_RealTime_1992-3-4.pdf (“Button3”) and further in view of Richard et al., US 6,564,120 B1 hereafter know as Richard.

Claims 1, 2-6, 8-15 and 21:

- ***Plurality of tracking devices track time and temperature at discrete time intervals,***
- ***Logging the information being tracked;***
- ***Real-time tracking of events associated with the items, the events including temperature, location and access to the plurality of items by a user;***

iButton in at least page 5 discloses a thermochron device being used to track time and temperature and further discloses the time and date-stamped temperature being taken and recorded at discrete intervals. iButton in at least page 5 further discloses that the thermochron device can go wherever thermally vulnerable products go and may easily be attached to containers of frozen or fresh foods, blood products, etc. for recording time and temperature during transport and storage.

iButton in at least page 8 discloses the thermochron device being configured to log the time and temperature and the device being tracked.

iButton does not specifically disclose “timing of the events”; however Button3 in at least page 2 discloses a particular “Memory iButton” with a stop-watch, alarm clock, time and date stamp, logbook, hour meter, calendar, system power cycle timer, interval timer and event scheduler.

It would have been obvious, at the time of the invention, to one of ordinary skill to modify iButton with Button3 for the purpose of selecting a specific iButton based on the features or function

required to accomplish the task at hand as there are various iButton models to choose from. Button3 represents one of the available “design specific choices” (see page 2, item 1 of iButton).

- **An access control system granting access and identifying access to a plurality of items by use of user identification;**

iButton in at least page 3 discloses the iButton being used to grant its owner access to a building, a PC, a piece of equipment, or a vehicle and in page 5 further discloses a globally unique address for identifying the device.

- **The tracking devices communicate with a network to store and receive information,**

iButton in at least page 10 and page 11 discloses that the thermochron device can be networked, can be Web-addressable and may update its own Web page.

iButton and Button3 do not disclose the following limitations. However, Richard does in at least Fig. 8, Column 2, lines 14-28 discloses:

- ***A storage unit;***
- ***With inner removable storage unit.***

Richard in at least Column 5, lines 42-54 further discloses:

- ***Processing device that reads and records the tracking data from the plurality of tracking devices, the timing of the events, and the identification of the user from the access control system;***

Richard in at least Column 2, lines 25-28 discloses a computer operatively connected to a robot mechanism for controlling movement and access operation and for registering the contents of the storage receptacles. Richard in at least Column 5, lines 42-54 discloses a computer 38 which controls movement and access operations, registers the contents of storage receptacles 20 and the storage receptacles of containers 22.

- ***A data storage device electrically linked to the processing device;***
- ***Tracking data is stored in the data storage device.***

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Richard in at least Column 3, lines 1-7 discloses the storage receptacles in a rectangular grid array. Richard in at least Column 3, lines 26-30 further discloses that the storage receptacles are analogous to safety deposit boxes with an inner and outer panel to allow access to the safety deposit boxes and further discloses in Column 7, lines 13-15 that storage containers may take any form known in the art.

- ***Inner storage unit is a rack, a drawer storage rack or a drawer.***
- ***Inner storage unit is a shelf, a tray.***
- ***Inner storage unit is a Petri dish.***

Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine the well know temperature, time, and access control elements of iButton and Button3 with the well known storage features of Richard with the motivation of achieving the combined predictable results for tracking the time and temperature of an item in storage.

Claim 7:

With regard to the following limitations:

- ***Wherein the inner storage unit is a shelf having electrodes, and***
- ***Further wherein the electrodes of the shelf are electrically connected to a network with the processing device so that the status of the items is monitored.***

In at least page 3 and 11 of iButton it is disclosed that a handheld computer or cordless pen-style Blue Dot receptor can be used to connect an iButton to a network and gather status information (temperature and time history) from the iButton. Richard in at least Column 8, lines 8-21 discloses that temperature sensors and feedback loops are in operative contact with the storage units for monitoring and controlling the temperatures thereof.

Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to combine the well known network elements of iButton with the equally well known elements of Richard storage unit monitoring interface with the motivation of achieving the combined predictable results for monitoring the status of an item in a storage unit.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claim 22** is rejected under 35 U.S.C. 102(b) as being anticipated by Margrey et al., US 5,366,896 A (“Margrey”).

Claim 22:

With regard to the following limitations for a storage system:

- ***A storage unit;***

Margrey in at least Column 11, lines 29-47 discloses a specimen holding or storage device with a plurality of sensors.

- ***A plurality of tracking devices configured to:***

- ***Monitor the presence of a plurality of items removably stored within the storage unit and***

Margrey in at least Column 11, lines 29-47 further discloses that the sensors function to determine the position within the storage device that is empty.

Margrey in at least Column 14 lines 45-52 discloses that sensors are used to check the positions of samples in the sample storage device. The sensors may include air pressure sensors, Hall effect sensors and optical sensors.

- ***Generate tracking data with a real-time clock tracking the timing of events associated with the items, the events including location and access to the plurality of items by a user;***

Margrey in at least Column 19, lines 66-67 and Column 20, lines 1-14 discloses a real-time status device interface.

Margrey in at least Column 11, lines 29-47 further discloses that the storage device has temperature regulated regions within the container.

Margrey in at least Column 23, lines 14-39 discloses that access to the storage system is controlled by user specific passwords including magnetic card stripe, barcode, and key or fingerprint recognition devices.

- ***An access control system granting access and identifying access to the plurality of items by the user through an identification of the user; and***

Margrey in at least Column 23, lines 14-39 discloses that access to the storage system is controlled by user specific passwords including magnetic card stripe, barcode, and key or fingerprint recognition devices.

- ***A processing device that reads and records the tracking data from the plurality of tracking devices, the timing of events, and the identification of the user from the access control system.***

Margrey in at least Column 14, lines 25-31 discloses an electronic interface that contains a microprocessor equipped with software (stored on an EPROM) which interprets the output information from the various sensors that are located on devices on the robot table (specimen holding device, target device, storage device, and etc.)

Margrey in at least Column 19, lines 66-67 and Column 20, lines 1-14 discloses a real-time status device interface.

Margrey in at least Column 23, lines 14-39 discloses that access to the storage system is controlled by user specific passwords including magnetic card stripe, barcode, and key or fingerprint recognition devices.

Claim Rejections - 35 USC § 103

11. **Claims 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Margrey et al., US 5,366,896 A ("Margrey") as applied to claim 22 above, and further in view of iButton.

Claims 23 and 24:

With regard to the further limitation of Claim 22:

- ***Wherein the pluralities of tracking devices are further configured to monitor the temperature of the items.***
- ***Wherein the events further include the temperature of the items.***

Margrey in at least Column 14, lines 25-31 discloses an electronic interface that contains a microprocessor equipped with software (stored on an EPROM) which interprets the output information from the various sensors that are located on devices on the robot table (specimen holding device, target device, storage device, and etc.)

Margrey in at least Column 11, lines 29-47 further discloses that the storage device has temperature regulated regions within the container.

Margrey does not disclose monitoring the temperature of the items; however iButton in at least page 5 discloses a thermochron device being used to track time and temperature and further discloses the time and date-stamped temperature being taken and recorded at discrete intervals. iButton in at least page 5 further discloses that the thermochron device can go wherever thermally vulnerable products go and may easily be attached to containers of frozen or fresh foods, blood products, etc. for recording time and temperature during transport and storage.

iButton in at least page 8 discloses the thermochron device being configured to log the time and temperature and the device being tracked.

In at least page 3 and 11 of iButton it is disclosed that a handheld computer or cordless pen-style Blue Dot receptor can be used to connect an iButton to a network and gather status information (temperature and time history) from the iButton.

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It would have been obvious at the time of the invention, to one of ordinary skill to combine Margrey electronic sensor interface with iButton's thermochron item temperature recording device by known methods with no change in their respective functions and the combination would have yielded predictable results.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

14 August 2010

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627